

result in uneven steering.⁹ If the tyres are deflated or punctured the brakes (which work by a plate being pushed or pulled against the outer edge of the tyre) are ineffective, and hence the wheelchair may move when patients get up or sit down, causing them to fall.

Failure of brakes caused by faults in the braking mechanism has been shown in almost two thirds of hospital wheelchairs in Leeds and Wessex.^{4,7} Many wheelchair brakes are crude devices, which work loose and need constant adjustment.⁶ A quarter of wheelchair users at home find the brakes difficult to operate because these are too stiff or the handles are placed awkwardly.⁵

Many other features also leave much to be desired. Some wheelchairs are too wide to be manoeuvred indoors and get stuck in doorways.⁵ The weight of a manual wheelchair and its occupant causes difficulties in steering and propelling outside, with kerbs presenting particular difficulties.^{6,10,11} Arm rests are often the wrong height, and some are not detachable, making it impossible for the patient to slide into the chair.¹² Their foam coverings are insufficient: when worn, sharp edges are uncovered, which may lacerate the forearms. One third of footplates are defective or missing from hospital wheelchairs and the feet are then unsupported and unprotected.⁷ Loose footplates injure shins. Heel straps, to prevent the feet sliding backwards off the footplate, often do not work or are uncomfortable, chaffing heels and the Achilles tendons.¹³ When the canvas straps are worn away the upright metal foot rest spikes become exposed, which may cause penetrating foot injuries and lacerations.^{4,7} Hospital wheelchairs are not only uncomfortable and unsafe: they are also unhygienic, being contaminated by blood, urine, and faeces.⁷

Applying the technology we already have would do much to improve matters. Every wheelchair user should be provided with a cushion—a wide range is now available.¹⁴ Pneumatic inner tubes might be replaced by new synthetic solid tyre inserts, which do not deflate or puncture, and this should improve patient safety and comfort.¹⁵ Light, robust metals developed in aeronautical research, which have already improved the quality of wheelchairs for sports enthusiasts, should be available to the wider population using wheelchairs.¹⁶

Further research is needed to improve the brakes of wheelchairs. Better designed arm rests, foot rest plates, and heel straps are urgently needed. Hospitals should consider appointing a wheelchair team (composed of an occupational therapist, an engineer, and a doctor interested in rehabilitation) or setting up wheelchair clinics to ensure that the staff are taught more about the problems of wheelchairs and their users and that wheelchairs are regularly inspected, maintained, and cleaned.

Finally, we must not forget that the disabled and the elderly are consumers. Manufacturers should consider their views on wheelchairs more carefully.¹⁷

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Fatigue syndrome: neurasthenia revived

Psychiatric illnesses are worth considering

Neurasthenia or "exhaustion of the nervous system" was a diagnosis popularised by the American psychiatrist George Beard in 1869. He described "general malaise, debility of all the functions, poor appetite, abiding weakness in the back and spine, fugitive neuralgic pains, hysteria, insomnia, hypochondriases, disinclination for consecutive mental labor, severe and weakening attacks of sick headache, and other analogous symptoms. . . ." Silas Weir Mitchell, the American neurologist, developed the rest cure, which consisted of a health diet, absolute rest, isolation from the family, and daily massage.² Such was the appeal of a non-pejorative diagnosis and an agreeable treatment that an epidemic of neurasthenia spread through the United States and on to Europe. The diagnosis became so popular, however, and included so many symptoms that it fell into disuse.³

The provisional draft of the 10th *International Classification of Diseases* has retained the concept of neurasthenia with a narrower definition than that of Beard.⁴ It describes fatigue, weakness, and exhaustion after minimal effort, with accompanying symptoms of reduced interest, irritability, insomnia and hypersomnia, poor concentration, and various physical symptoms. Appreciable depression and anxiety are absent.

Studies of psychiatric outpatients using cluster and factor analyses have shown a factor with fatigue, which was separate from depression and anxiety.⁵ The latent trait analysis of patients in general practice by Goldberg and colleagues showed that the main dimensions of illness were anxiety and depression.⁷ They also found, however, a small dimension that included tiredness and lack of energy. These were cross sectional studies so we do not know whether patients with fatigue stay fatigued or whether their fatigue is an early symptom of other disorders, such as depressive illness.⁸

There has been much recent speculation about the existence of a chronic fatigue syndrome, which might follow various infections.⁹⁻¹¹ The cardinal symptom is fatigue, which with the associated symptoms of poor concentration and memory, irritability, and changes in sleep, is reminiscent of neurasthenia narrowly defined. Certainly, reports of prolonged neurasthenia-like syndromes have been described after infections such as hepatitis,¹² brucellosis,¹³ encephalitis,¹⁴ and infectious mononucleosis.¹⁵ Preliminary results from a six month prospective study suggest that a fatigue syndrome does indeed exist after infectious mononucleosis (P White and A Clare, annual conference of the Royal Australia and New Zealand College of Psychiatrists, Sydney, 1988).

Does this fatigue originate centrally in the brain or peripherally in muscle? The findings on nuclear magnetic resonance of an early and prolonged fall in muscle pH with exercise suggested peripheral lesions,¹⁶ but later reports have been less convincing, with a schizophrenic patient showing the same changes.¹⁷ As these studies have not controlled for muscle disuse through inactivity this finding might be an effect rather than a cause. Stokes and colleagues used a twitch interpolation technique and showed that fatigue could not be explained by peripheral mechanisms—so was likely to be central in origin.¹⁸

With what other symptoms is fatigue associated? Chen examined a large community sample and found that one in five subjects reported fatigue for over one month.¹⁹ Fatigue was strongly associated with self reported anxiety, depression, and "stress." General practice studies have reported similar findings. Kroenke and colleagues screened an unselected group of 1159 consecutive patients, a quarter of whom reported fatigue as a serious problem for more than a month.²⁰ Patients were excluded if they were currently under the care of a psychiatrist or had an obvious medical disorder, yet four fifths of the fatigued patients reported depression or somatic anxiety, or both, compared with one in eight of the controls.

What proportion of patients have psychiatric or "organic" diagnoses? Morrison studied 176 patients with unexplained fatigue of recent origin and found that two fifths were later given a psychiatric diagnosis (mainly depression and anxiety).²¹ "Organic" diagnoses were made in a further two fifths of patients, with viral illnesses being the commonest, especially in the young. Of the remaining 35 patients, 21 had mixed diagnoses and the rest were undetermined. Psychiatric diagnoses were particularly associated with a duration of symptoms longer than four months.

Studies of patients with fatigue of longer duration showed that two thirds of patients had a recognisable psychiatric disorder. Taerk and colleagues studied 24 patients with postinfectious "neuromyasthenia," 16 of whom scored more than 9 on the Beck depressive inventory.²² Manu and colleagues studied 100 self referred patients with chronic fatigue of 13 years' mean duration: 66 subjects had current DSM III psychiatric disorders.²³ Wessely and Powell studied 47 patients with unexplained fatigue referred to the National Hospital for Nervous Diseases.²⁴ They found that 34 had psychiatric disorders even after exclusion of fatigue as a symptom. This compared with 12 of 33 controls with peripheral neuromuscular disorders. The commonest diagnosis in these last two studies was major depressive disorder in half the patients, with a further 15% having a somatisation disorder. It is difficult to assess whether these psychiatric disorders are primary or secondary to the fatigue.

Three points should be noted in relation to these studies: a third of patients with fatigue had no evidence of psychiatric disorder; generalisation from selected populations may be unwise; and "organic" and "psychiatric" diagnoses may be found together in the same patients,^{21 25} making a simple "either/or" classification inappropriate.^{10 25} The present evidence suggests that a chronic fatigue syndrome does exist, certainly after particular infections. The symptoms resemble the more narrowly defined concept of neurasthenia. The reliability of the concept over time is uncertain. If symptoms persist treatable psychiatric disorders will be found in two thirds of patients.

We should, however, remember what Robert Whytt wrote in 1765: that physicians diagnosed as "nervous, hypochondriac, or hysteric... all those disorders whose nature and causes they were ignorant of."²⁶ Given our present inability to cure patients with chronic fatigue syndrome we should

therefore treat what we know is treatable while keeping an open mind about aetiology.²⁷

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Conventional and complementary treatment for cancer

Time to join forces

Diagnosing cancer provokes stress in patients and their families. Treatment given in unfamiliar surroundings is often frightening and unpleasant, especially as the results are uncertain. Although great advances have been made in managing some tumours, for most there is little that is new.¹ Better treatments will certainly be devised, but how can we help our patients now?

The psychological stresses associated with cancer have been well described,^{2 3} but all too often they are concealed by the patient and so may go unrecognised. Yet perhaps one in two patients with cancer is psychologically disturbed, and the problem is often treatable or preventable.⁴ Patients' widespread need for further information and guidance about cancer is shown by the growing use made of the telephone advice service offered by the British Association of Cancer United Patients (BACUP).⁵